

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An air conditioning system reversible for heat pump operation, ~~in particular a motor vehicle air conditioning system, having comprising~~ a circuit through which refrigerant flows and in which are arranged a refrigerant compressor and a first heat exchanger, an inner heat exchanger, an expansion element and a second heat exchanger, the first heat exchanger serving as a gas cooler in AC operation and the second heat exchanger serving as an evaporator in AC operation, further comprising at least one valve configured to deactivate the inner heat exchanger during heat pump operation, ~~wherein a device for reversing the flow direction of the refrigerant is provided for heat pump operation, and means are provided which deactivate the inner heat exchanger while the flow direction is reversed.~~

2. (Currently amended) The air conditioning system as claimed in claim 1, ~~wherein the means which~~ the at least one valve configured to deactivate the inner heat exchanger while the flow direction is reversed preferably comprise comprises two non-return valves.

3. (Currently amended) The air conditioning system as claimed in claim 1, ~~wherein the~~ further comprising a device for reversing the flow direction of the refrigerant comprises comprising a cross-over circuit of the back pressure and high pressure connections on or in the refrigerant compressor.

4. (Previously Presented) The air conditioning system as claimed in claim 2, wherein the non-return valves are provided on or in the inner heat exchanger.

5. (Previously Presented) The air conditioning system as claimed in claim 1, wherein the refrigerant compressor can be operated in two directions or a correspondingly acting configuration of lines and valves is provided.

6. (Currently amended) The air conditioning system as claimed in claim 1, wherein ~~an~~ the expansion element ~~having~~ comprises antiparallel bypasses ~~is provided in the~~ circuit.

7. (Previously Presented) The air conditioning system as claimed in claim 1, wherein the heat exchanger which serves as an evaporator in AC operation functions as a heater in heat pump operation.

8. (Previously Presented) The air conditioning system as claimed in claim 1, wherein CO₂ is used as the refrigerant.

9. (Currently amended) The air conditioning system as claimed in claim 1, further comprising ~~wherein~~ a compressor regulator valve and a device for switching ~~the~~ a refrigerant flow direction that are electrically controlled.

10. (Currently amended) The air conditioning system as claimed in claim 1, wherein ~~the~~ a stroke volume of the refrigerant compressor is adjustable.

11. (Previously Presented) A method for operating an air conditioning system as claimed in claim 1, the refrigerant flowing through the circuit counter to the normal flow direction, and the inner heat exchanger being bypassed, during heat pump operation.